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"ПРИРОДНИЧІ ТА ГУМАНІТАРНІ НАУКИ. АКТУАЛЬНІ ПИТАННЯ"

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THE CHEAPEST AND MOST POWERFUL MICROPROCESSOR?

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On the 2nd of March, 2017 hardware reviewers worldwide began posting their first reviews of Ryzen 7 1800X. Ryzen 7 CPUs were taken through virtually every conceivable CPU synthetic and real world productivity test or benchmarks, as well as a wide range of games at various resolutions and settings. Many independent reviewers have given their opinion about the release of the new microprocessor AMD Ryzen. So, let me introduce the varieties of this processor to you.

AMD Ryzen was released in 3 main types, they are : AMD Ryzen 3, AMD Ryzen 5 and AMD Ryzen 7.

AMD is trying to shake up the market with shockingly low prices for its 8C/16T Ryzen 7 line-up. And while these CPUs don't dominate every workload, there is hope the company's newest architecture is compelling across enough segments to put much-needed pressure on Intel. One component of AMD's strategy involves attractive pricing. The flagship Ryzen 7 1800X grabbed attention for its ability to battle Intel's Broadwell-E-based Core i7-6900K for \$550 less (and with the same number of execution cores). We agree that the 1800X is compelling in threaded productivity and content creation apps. But we think you'll derive more value out from the cheaper Ryzen 7 1700X (\$400) and 1700 (\$330). The former goes up against Intel's \$450 Core i7-6800K, while the latter undercuts Core i7-7700K. In both cases, AMD chips wield more processing resources than the Intel competition.

AMD claims that the gaming performance issues stem from how applications interact with the intricacies of its new architecture. The company expects a wave of updates from various developers that will eventually remedy this (though so far only two developments have publicly committed to optimizing their engines for the new processors). Until something concrete happens, though, we don't see much value in gaming-specific Ryzen 7 1800X builds. Might the Ryzen 7 1700X cast a more favorable light on gaming? After all, it costs \$100 less, carries over the eight-core configuration with 16MB of L3 cache, and continues to offer an unlocked ratio multiplier.

The unlocked multiplier is especially interesting, given the similarities up and down the Ryzen 7 family. Given a similar 95W TDP between the \$500 1800X and \$400 1700X, then, the only technical differences between them are their base, two-core Precision Boost, and XFR clock rates. Out of the box, 1800X enjoys a 200 MHz advantage down low and up top. But we've heard claims that 1700X hits a similar ceiling as 1800X when it comes to overclocking.

Right out of the gate, Ryzen 7 1700X looks like a smarter buy than 1800X. But is it smart enough to maintain AMD's strong position in well-threaded desktop apps *and* make up some value ground in gaming, where the architecture isn't as strong.